

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-15. (Cancelled)

16. (Currently amended) A method for determining the reactivity of a subject to IDDM autoantigen, comprising 1) contacting ~~cells~~ T-cells derived from the subject with a peptide comprising the formula:

$X_1X_2X_3$

wherein:

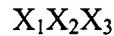
X_1 and X_3 may be the same or different and each is an amino acid sequence comprising from 0 to 15 naturally or non-naturally occurring amino acid residues; X_2 is FFYTPKTRREAED (SEQ ID NO: 1) ~~and wherein said peptide is capable of reacting with T-cells and modifying T-cell function when incubated with cells from subjects with pre-clinical or clinical IDDM, and 2) measuring the reactivity of said ~~cells~~ T-cells to said peptide by an appropriate assay thereby determining the reactivity of said subject to IDDM autoantigen.~~

17. (Currently amended) A method according to claim 16 wherein the ~~cells~~ T-cells are ~~selected from the group comprising isolated from samples selected from the group consisting of~~ PBMCs, anti-coagulated whole blood and/or tissue biopsy cells.

18. (Currently amended) A method according to claim 16 or 17 wherein an appropriate assay includes a proliferation assay, cytotoxic assays, cellular reactivity or a combination thereof.

19-36. (Cancelled)

37. (Currently amended) A method for determining the reactivity of a subject to IDDM autoantigen, comprising 1) contacting ~~cells~~ T-cells derived from the subject with a peptide comprising the formula:



wherein:

X_1 and X_3 may be the same or different and each is an amino acid sequence comprising from 0 to 40 naturally or non-naturally occurring amino acid residues; X_2 is any amino acid sequence of from 10 to 100 residues and consists of an amino acid sequence comprising SEQ ID NO:1; ~~and wherein said peptide is capable of reacting with T cells and modifying T-cell function when incubated with cells from subjects with pre-clinical or clinical IDDM~~, and 2) measuring the reactivity of said ~~cells~~ T-cells to said peptide by an appropriate assay thereby determining the reactivity of said subject to IDDM autoantigen.

38-40. (Cancelled)

41. (Currently amended) A method according to claim 37 wherein the ~~cells~~ T-cells are ~~selected from the group comprising isolated from samples selected from the group consisting of~~ PBMCs, anti-coagulated whole blood and/or tissue biopsy cells.

42. (Currently amended) A method according to claim 37 or 41 wherein an appropriate assay includes a proliferation assay, cytotoxic assays, cellular reactivity or a combination thereof.